

# Chapter 10. DATA COMMUNICATION SYSTEMS

## Section 1. GENERAL

### 10-1-1. TYPES OF DATA ACCEPTABLE ON FAA DATA COMMUNICATIONS SYSTEMS

- a. Distress messages.
- b. Messages concerning safety to human life.
- c. Flight movement/control/safety messages.
- d. Aviation meteorological observations/forecasts/warnings.
- e. Administrative messages which pertain to FAA personnel, facilities, or property.
- f. Notice to Airmen (NOTAM's) data.

### 10-1-2. PRIORITY MESSAGES

(See TBL 10-1-1.)

**Priority Messages**

Priority	Message Types	Action Required
SS	Involves safety of life or property. Restricted to emergency situations.	Transmit immediately to all addressees and deliver to all internal/external offices you are responsible for.
DD	Priority operational and circuit control data.	Same as above.
FF on local agreements	Flight movement and control data relating safe/efficient operation of aircraft. Also for administrative data of a directive nature.	Transmit immediately, make internal/external delivery during next available administrative work day if office is closed. Delivery may be required to duty officer, dependent.
GG	Meteorological, NOTAM and routine administrative data.	Transmit immediately, make internal/external delivery by 10:30AM of the next business day.

TBL 10-1-1

### 10-1-3. GENERAL NOTICES

a. GENOT's are transmitted by Washington Headquarters Message Center (RWA/KRWAYAYX) via NADIN.

b. RENOT's are transmitted through NADIN by the ROC.

c. All administrative centers (headquarters/regional/aeronautical offices) are staffed 24 hours per day. The FAA Technical Center is only staffed from 0600-2200 local, from Monday through Friday. Messages sent to them will be acknowledged/disseminated as appropriate during those hours.

d. Administrative messages should be restricted to 20 lines of text and 69 characters per line. Messages exceeding this length shall be sent in individual parts. Facilities who miss a RENOT or GENOT should attempt to obtain it from adjacent facilities, then the ROC. ROC will relay requests to RWA for retransmission of GENOT's.

e. Facilities receiving administrative messages shall not acknowledge unless the message is numbered. Message originators desiring an acknowledgement shall add a number line as the first line of text.

#### EXAMPLE-

DCA002 CLE DAY  
(TEXT)

### 10-1-4. GROUP CODES

a. NADIN has established group codes to allow message originators to input a single address, which will result in dissemination to a selected number of facilities.

b. System-wide group codes have been established for the primary use of RWA/KRWAYAYX and the ATC System Command Center (KCFCZDZX). These codes are KDOMYFYX and KDOMYYYYX respectively.

c. A group code has also been established for each regional office and ARTCC primarily for the issuance of RENOT's and all ARTCC instructions. They are as follows for Regional Offices in TBL 10-1-2 and ARTCC's in TBL 10-1-3.

**Region Group Code**

<i>Region</i>	<i>ID</i>	<i>Region</i>	<i>ID</i>
Alaska	PANCYGYX	Northwest Mountain	XST
Central	XKC	Southern	XTL
Eastern	XNY	Southwest	XFE
Great Lakes	XGC	Western-Pacific	XLA
New England	XBW		

TBL 10-1-2

**ARTCC Group Code**

<i>ARTCC</i>	<i>ID</i>	<i>ARTCC</i>	<i>ID</i>
Albuquerque	XXI	Kansas City	XXS
Atlanta	XXN	Los Angeles	XXF
Boston	XXU	Memphis	XXM
Chicago	XXC	Miami	XXL
Cleveland	XXD	Minneapolis	XXE
Denver	XXO	New York	XXR
Ft. Worth	XXJ	Oakland	XXG
Houston	XXH	Salt Lake City	XXP
Indianapolis	XXA	Seattle	XXT
Jacksonville	XXK	Washington	XXQ

TBL 10-1-3

**NOTE-**

All of the group codes can be converted to a full eight-character address by placing a K in front of and YFYX following the three characters listed in TBL 10-1-2 and TBL 10-1-3.

d. Several other group codes exist for addressing selected groups of ATC facilities. To support MTR data transmission specifically, additional two-letter codes were developed to include all FSS facilities within particular states or areas. Those states with only one FSS, or those with all M1FC facilities, are not included in these codes. All M1FC facilities are served by the address KAWPYFYX. The two-letter identifiers are as follows in TBL 10-1-4:

**Two-letter identifiers**

AK	AR	CA	KY	NC	PA
TN	WA	WV			

TBL 10-1-4

e. In addition, the following seven-group codes were established that include multiple states:

KFSSYFCE (CENTRAL AREA)

AR-IN-IL-KY-MO-TN

KFSSYFEA (EAST COAST AREA)

MD-NC-NJ-VA-WV

KFSSYFNE (NORTHEAST AREA)

CT-ME-VT

KFSSYFNP (NORTHERN PLAINS AREA)

ID-MT-ND-NE-SD-WY

KFSSYFSE (SOUTHEAST AREA)

AL-FL-GA

KFSSYFWC (WEST COAST AREA)

AZ-CA-NV-OR

f. M1FC contains a group code for Drug Enforcement Agency (DEA). All VFR flight plans are automatically transmitted to the destination and DEA at the time of activation.

g. The group code KSARYCYX has been established to assist in the processing of INREQ's and ALNOT's.

**10-1-5. MESSAGE FORMATS**

a. Personnel should adhere to the transmit formats defined for systems in use; i.e., M1FC, AIS. Failure to comply can result in the message being rejected by either NADIN or WMSC. This may result in non-delivery to the intended recipients.

b. Full keyboard punctuation is allowed on all messages destined for internal FAA, DOD, NWS dissemination. For international dissemination, punctuation should be limited to those characters identified in pertinent ICAO documents.

c. Contractions and abbreviations should be used to shorten data transmissions to the extent possible. In no case should one be used that is not documented in FAAO 7340.1, Contractions. For international communications, be aware that the foreign correspondent may not understand all FAA contractions and may not

have a full command of the English language. Care should be exercised in international communications to avoid slang phrases and non-ICAO approved abbreviations.

d. RQ/WQ. This message is used when requesting an individual report(s). It consists of the keywords /RQ for AIS or VM for M1FC for individual requests from the global and local data base; /WQ for AIS or NS RQ for M1FC for individual reports from WMSC. To avoid circuit congestion, requests for this type of data may not exceed one line. The following kinds of data may be requested using these keywords: SA, NTM, FD1, FD2, FD3, SW, SD, and FT. The reply to the request for an SA will include the basic METAR and any subsequent Specials (SPECI), amendment, or correction. It will also include all current NOTAM's and PIREP's (UA/UUA) for that weather location. A request for SP will return only the METAR and any SPECI's for that hour. The response to NOTAM requests will include all current NOTAM's for the NOTAM file specified, while requests for an FD or FT will include the current forecast and the latest amendments issued.

#### NOTE-

*This procedure is adequate to facilitate reviewing weather trends; but for briefing purposes, the SA request should be used to ensure all en route and/or terminal NOTAM data pertinent to the flight is available.*

#### EXAMPLE-

*(This example is a request for the latest hourly observation and terminal forecast for JFK from WMSC.)*

AIS  
/WQ JFK SA JFK FT

M1FC  
NS RQ JFK SA JFK FT

#### EXAMPLE-

*(To obtain headers when requesting FD data, the input message should contain the word DATA when requesting U.S. FD's and FCST when requesting Canadian FD's.)*

AIS  
/RQ DATA FD1 SFO FD1 FCST FD1  
YYZ FD1

M1FC  
NS RQ DATA FD1 SFO FD1 FCST FD1  
YYZ FD1

e. WC. This message is used for requesting information, such as that contained in the SACA20 KWBC, which is available at the WMSC in collective form only. Only five collectives shall be called for in a request.

#### EXAMPLE-

AIS  
/WC SACA20 KWBC

f. RC. This message is used to retrieve a collective from the local data base. Non-AIS facilities use it for retrieving data listed in subpara 10-1-5e. Limit requests to one at a time.

#### EXAMPLE-

M1FC  
NS RC SACA20 KWBC

g. RL/WL. The RL function has been set aside for the use of the AWP in M1FC. The AWP is the only facility able to use the RL keyword in M1FC. The WL function should be coordinated with WMSC prior to use by a AIS facility. This message is used in requesting a group of reports, forecasts, or a mixture of these to meet specific requirements. In this type of message, information is requested by specifying a single predetermined list. Only one list may be requested in each message. The lists are intended to provide groupings of individual reports, such as the observations and/or forecasts for all locations in a metropolitan area or along an airway.

### 10-1-6. WMSCR NEGATIVE RESPONSE MESSAGES

a. WMSCR automatically generates a negative response to request/reply inputs for which it cannot deliver.

1. NO REPORT AVBL. This response means the current data has not been received by WMSCR.

2. NOT IN SYSTEM. This response means WMSCR does not receive and store the requested data.

3. INVALID FORMAT. This response means the computer cannot process the request because of an input error.

b. WMSCR will generate only one negative response message to an RQ transmission that requests multiple reports and only when none of the data requested can be delivered.